

Cloud Computing AND Big Data Forum & Workshop Agenda January 15, 16 and 17, 2013

National Institute of Standards and Technology
100 Bureau Drive, Building 101, Gaithersburg, MD 20899

DAY 1 – Tuesday, January 15, 2013

8:00	Check-in (<i>Administration Building 101</i>)
8:00 - 9:00	Real World Collaboration with Academia, Government, Industry & Standards Development Organizations (<i>Admin. Bldg. 101, Flag Hallway & Portrait Room</i>)
FORUM – (<i>NIST, Bldg. 101, Red Auditorium</i>)	
9:00 - 9:10	Welcome & Opening Remarks Patrick Gallagher , Under Secretary of Commerce for Standards and Technology and Director, National Institute of Standards and Technology (NIST)
9:10 - 9:20	Keynote Steven L. VanRoekel , United States Chief Information Officer and Administrator, Office of Electronic Government, Office of Management and Budget
9:30 - 10:40	Panel: Convergence of Cloud and Big Data Moderator: Charles H. Romine , Director, NIST Information Technology Laboratory (ITL) <ol style="list-style-type: none">Thomas Cynkin, Vice President and General Manager, Chief Corporate Representative, Fujitsu Ltd.Cyrus Wadia, Assistant Director for Clean Energy & Materials Research and Development, White House Office of Science and Technology PolicyAlex Szalay, Alumni Centennial Professor, Department of Physics and Astronomy, The Johns Hopkins UniversityGeoffrey Fox, Professor of Informatics and Computing, Physics, Indiana UniversityPeter Tseronis, Chief Technology Officer, Department of Energy
10:40 - 11:00	Introduction to Forum and Workshop Christopher L. Greer , Acting Senior Advisor for Cloud Computing and Associate Director, Program Implementation Office, ITL, NIST USG Cloud Computing Technology Roadmap Progress Robert Bohn , NIST Program Manager for Cloud Computing
11:00 - 11:30	Break (on your own; cafeteria accepts cash, credit cards) Real World Collaboration with Academia, Government, Industry & Standards Development Organizations (<i>Admin. Bldg. 101, Flag Hallway & Portrait Room</i>)

FORUM – (NIST, Bldg. 101, Red Auditorium) DAY 1, Tuesday, January 15, 2013

11:30 - 12:30

Progress on Standards for Interoperability between Clouds

Moderator: John Messina, NIST Cloud Computing Reference Architecture and Taxonomy Working Group Co-chair

1. **Chris Davis**, Compliance Solutions Architect, Verizon Enterprise Solutions
2. **Rob Vietmeyer**, Chief Information Officer, Department of Defense
3. **Alan Yoder**, Manager, Storage standards at Huawei , SNIA Liaison officer at ISO JTC 1 SC 38 , Secretary, Governing Board at Storage Management Initiative, SNIA

12:30 - 1:30

Focus Session: USG Cloud Computing Technology Roadmap Priority Action Plan (PAP) Progress and Examples

Moderator: Robert Bohn, NIST Cloud Computing Program Manager and Reference Architecture and Taxonomy Working Group Co-chair

Requirement 1: International voluntary consensus based interoperability, portability and security standards

Stephen L. Diamond, Chair, Institute of Electrical and Electronics Engineers (IEEE) Cloud Computing Standards Committee

Requirement 2: Solutions for High Priority Security Requirements

Sharad Mehrotra, Professor of Computer Science, University of California, Irvine

Requirement 3: Technical specifications to enable development of consistent, high quality Service Level Agreements

Ken Stavinoha, Solutions Architect, Cisco Systems

Requirement 4: Clearly & consistently categorized cloud services

Joel J. Fleck, II, Senior Standards Architect, Global Technology Program, HP Labs, Hewlett-Packard Company

1:30 - 2:45

Lunch (On your own; cafeteria accepts cash, credit cards)

Real-World Collaboration with Academia, Government, Industry & Standards Development Organizations (*Admin. Bldg. 101, Flag Hallway & Portrait Room*)

Optional Session, NITRD Interagency Big Data Senior Steering Group (BDSSG), Lecture Room A

This special topic briefing occurs concurrently from 1:45 – 2:30 pm PLEASE BRING YOUR LUNCH & JOIN US

- George O. Strawn, Director, Federal Networking and Information Technology Research and Development (NITRD), National Coordination Office (NCO)
- Suzanne Iacono, Senior Science Advisor for the Directorate for Computer and Information Science and Engineering (CISE) at the National Science Foundation (NSF)
- Wendy Wigen, Coordinator for BDSSG

2:45 - 4:15 Focus Session: USG Cloud Computing Technology Roadmap Priority Action Plan (PAP) Progress and Examples

Moderator: Michael Hogan, NIST Cloud Computing Standards Roadmap Working Group Co-chair

Requirement 5: Frameworks to support seamless implementation of federated community cloud environments

Alan Sill, Senior Scientist, and Site Director, Center for Cloud and Autonomic Computing at Texas Tech University; Vice President of Standards, Open Grid Forum (OGF), Co-Chair, Standards Acceleration to Jumpstart the Adoption of Cloud Computing (SAJACC) Working Group

Requirement 6: Updated Organization Policy that reflects the Cloud Computing Business and Technology model

Agnieszka Wodecka, Legal Officer, Unit E2: Software and Services, Cloud Computing at DG Connect, European Commission

Requirement 7: Defined unique government regulatory requirements, technology gaps, and solutions

Craig Lee and Melvin Greer, Network Centric Operations Industry Consortium (NCOIC)

Requirement 8: Collaborative parallel strategic “future cloud” development initiatives

Kyoung-Sook Kim, Researcher, National Institute of Communications Technology, Japan

Requirement 9: Defined and implemented reliability design goals

Shawn Veney, Principal GRC (Governance, Risk & Compliance) Architect for Microsoft Office 365

Requirement 10: Defined and implemented cloud service metrics

Daniel Burton, Senior Vice President and General Manager, Global Public Sector, Salesforce

4:15 - 4:30 Closing Remarks

Christopher L. Greer, NIST Senior Advisor for Cloud Computing and Associate Director, Program Implementation Office, ITL, NIST

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DAY 2 – January 16, 2013

8:00	Check-in (<i>Administration Building 101</i>)
8:00 - 9:00	Real World Collaboration with Academia, Government, Industry & Standards Development Organizations (<i>Admin. Bldg. 101, Flag Hallway and Lecture Room B</i>)
FORUM – (<i>NIST, Bldg. 101, Red Auditorium</i>)	
9:00 - 9:10	Welcome & Opening Remarks Charles H. Romine , Director, NIST Information Technology Laboratory
9:10 - 9:40	Keynote Vint Cerf , Vice President and Chief Internet Evangelist, Google
9:40 - 10:40	Big Data Use-Cases Government Perspectives Moderator: Ashit Talukder , Chief, Information Access Division, ITL, NIST <ol style="list-style-type: none">Peter Levin, Chief Technology Officer, Veterans AffairsPeter Lyster, Program Director, Division of Biomedical Technology, Bioinformatics, and Computational Biology, National Institute of General Medical Sciences, National Institutes of Health, (NIH/NIGMS)Sasi Pillay, Chief Technology Officer for IT, National Aeronautics and Space Administration (NASA)
10:40 - 11:00	Break (on your own; cafeteria accepts cash, credit cards) Real World Collaboration with Academia, Government, Industry & Standards Development Organizations (<i>Admin. Bldg. 101, Flag Hallway and Portrait Room</i>)
11:00 - 12:00	Big Data Lifecycle Management: Measurement Science, Benchmarking and Evaluation Challenges Moderator: John Henry Scott , Physicist, Materials Measurement Science Division, Material Measurement Laboratory, NIST <ol style="list-style-type: none">Brian Athey, Office of the Chair, Dept. of Computational Medicine and Bioinformatics (DCM&B), University of MichiganZachary G. Goldstein, Deputy Chief Information Officer, National Oceanic and Atmospheric Administration (NOAA)Michael L. Norman, Director of the San Diego Supercomputer Center and Distinguished Professor of Physics, University of California, San Diego

FORUM – (NIST, Bldg. 101, Red Auditorium) DAY 2, Wednesday, January 16, 2013

12:00 - 1:00 Panel: Big Data Analytics and Solutions

Moderator: John Garofolo, Senior Advisor, Information Access Division, ITL, NIST

1. **Adam Fuchs**, Chief Technology Officer, Sqrrl
2. **Will Cukierski**, Data Scientist, Kaggle
3. **Philip (Flip) Kromer**, Co-Founder and Chief Technology Officer, Infochimps
4. **Chaitan Baru**, Director, Center for Large-scale Data Systems research (CLDS), San Diego Supercomputer Center

1:00 - 2:30 Lunch (on your own; cafeteria accepts cash, credit cards)

Real World Collaboration with Academia, Government, Industry & Standards Development Organizations (*Admin Bldg. 101, Flag Hallway & Portrait Room*)

Optional Sessions: 1:15-2:20pm

Please bring your lunch and Join us

Session One, Lecture Room A: Standards Roadmap Working Group Meeting

Michael Hogan and Annie Sokol, NIST Cloud Computing Standards Roadmap Working Group Co-chairs

Session Two, Lecture Room B: NIST Cloud Computing Security Working Group Meeting

Michaela Iorga, NIST Senior Security Technical Lead for Cloud Computing; NIST Chair, Cloud Computing Security Working Group

Session Three, Lecture Room C: Standards Acceleration to Jumpstart the Adoption of Cloud Computing (SAJACC) Working Group Meeting

Alan Sill, Co-Chair, SAJACC Working Group; Senior Scientist, and Site Director, Center for Cloud and Autonomic Computing at Texas Tech University; Vice President of Standards, Open Grid Forum (OGF)

Session Four, Lecture Room D: Cloud Metric Working Sub-Group Meeting

Frederic de Vault, Chair, Cloud Metrics Sub-group of the Reference Architecture and Taxonomy Working Group

FORUM – (NIST, Bldg. 101, Red Auditorium) DAY 2, Wednesday, January 16, 2013

2:30 - 3:30 **Big Data Analytics , Processing and Interaction: Measurement Science, Benchmarking and Evaluation Challenges**

Moderator: Ashit Talukder, Chief, Information Access Division, ITL, NIST

1. **Jason Matheny**, Program Manager, Intelligence Advanced Research Projects Activity (IARPA)
2. **Ramakrishna Akella**, Professor of Information Systems and Technology Management, University of California Santa Cruz
3. **Chris White**, Program Manager, Defense Advanced Research Projects Agency (DARPA)

3:30 - 3:45 **Break** (on your own; cafeteria accepts cash, credit cards)

Real World Collaboration with Academia, Government, Industry & Standards Development Organizations (*Admin. Bldg. 101, Flag Hallway & Portrait Room*)

3:45 - 4:45 **Big Data Infrastructure**

Moderator: Mary Brady, Leader, Information Systems Group, Software and Systems Division, ITL, NIST

1. **Amr Awadallah**, Chief Technology Officer, Cloudera
2. **Jon Einkauf**, Senior Product Manager, Amazon Web Services
3. **Christopher D. Carothers**, Professor, Department of Computer Science, Rensselaer Polytechnic Institute

4:45 - 5:00 **Summary of first Big Data event and Day 2 Closing Remarks**

Christopher L. Greer, Acting Senior Advisor for Cloud Computing, Associate Director, Program Implementation Office, ITL, NIST

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DAY 3 – January 17, 2013

8:00	Check-in (<i>Administration Building 101</i>)
9:00	Welcome, James A. St. Pierre , NIST ITL Deputy Director,
9:10	Cloud Workshop Introduction, Robert Bohn , NIST Program Manager for Cloud Computing
9:20	Big Data Workshop Introduction, Ashit Talukder , Chief, Information Access Division, ITL, NIST
9:30	Morning Breakout Sessions (130 Minutes)
B01:	USG Cloud Computing Technology Roadmap Volume III Progress Eric Simmon , NIST Cloud Computing Roadmap Volume III primary author and lead, Co-Chair, Federal Cloud Computing Standards and Technology Working Group <ul style="list-style-type: none">• Business Use Cases David A. Lifka, Director - Cornell University Center for Advanced Computing (CAC) Director Research Computing - Weill Cornell Medical College (WCMC) Adjunct Associate Professor - Cornell Computing and Information Science (CIS) Cornell University• Standards Acceleration to Jumpstart the Adoption of Cloud Computing (SAJACC) Alan Sill, Co-Chair, SAJACC Working Group, Senior Scientist, and Site Director, Center for Cloud and Autonomic Computing at Texas Tech University; Vice President of Standards, Open Grid Forum (OGF)
B02:	International Cloud Computing Standards Progress and Considerations Michael Hogan and Annie Sokol , NIST Cloud Computing Standards Roadmap Working Group Co-chairs <ul style="list-style-type: none">• Status Report on JTC1 & ITU-T Collaborative Teams on Cloud Computing• Progress Update of NIST SP 500-291 – Standards Roadmap
B03:	NIST Research and Development in Cloud Metrics and Cloud Security (progress, future work and discussion) <ul style="list-style-type: none">• NIST Cloud Computing Metrics Frederic De Vaultx, NIST Associate, Chair, Metrics Working Sub-Group of Reference Architecture & Taxonomy• NIST Cloud Computing Security Reference Architecture Michaela Iorga, NIST Senior Security Technical Lead for Cloud Computing; NIST Chair, Cloud Computing Security Working Group; NIST Co-Chair, Cloud Computing Forensic Science Working Group
B04:	Discussion of Big Data Potential Collaborative Alliances John Garofolo , Senior Advisor, Information Access Division, ITL, NIST

F O R U M – (NIST, Bldg. 101, Red Auditorium) DAY3, Thursday, January 17, 2013

B05: Big Data Definition & Characteristics, and Standards & Measurement Science Needs

Christopher L. Greer, Acting Senior Advisor for Cloud Computing, Associate Director, Program Implementation Office, ITL, NIST and **Ashit Talukder** Chief, Information Access Division, ITL, NIST

11:40 Report Out & Workshop Next Steps: Cloud Computing and Big Data

12:30 Closing Remarks

Christopher L. Greer, Acting Senior Advisor for Cloud Computing, Associate Director, Program Implementation Office, ITL, NIST

12:40 Adjourn

Updated 1/14/13